

Application No. 10/786,329  
Amendment dated May 18, 2006  
Reply to Office Action of February 21, 2006

Docket No.: 20513-00590-US1

**SUBSTITUTE**  
**ABSTRACT OF THE DISCLOSURE**

In a nuclear reactor, cooled by pressurized water, an apparatus is employed for replacing a section of a primary circuit primary pipe that interconnects first and second components of a primary circuit. The apparatus cuts out and removes a section of the primary pipe. Supports are provided for the end parts of a new replacement section in a position held by the removed pipe. The apparatus bevel welds the end parts of the new replacement section of the primary pipe to confronting corresponding ends of the remaining primary pipe. Means are provided to work within the pipe along the entire length of the interior surface of the primary pipe and is introduced through one of first and second components of the primary circuit to a location within the welded replacement pipe section.